

## **REMARKS**

The Examiner's comments from the Office Action mailed August 15, 2006 have been carefully considered. Applicants thank the Examiner for indicating that claims 45 and 53 would be allowable if rewritten in independent form to include all features of the base claim and any intervening claims. Claim 45 has been rewritten as new claims 62.

Editorial revisions have been made to claims 45, 47, 57, and 60 to correct grammatical errors and to provide proper antecedent basis. Claim 17 has been amended to clarify that the single balloon extends from a proximal end to a distal end of the stent body. Support for this amendment can be found throughout the specification and figures, e.g., in FIGS. 4 and 6. No new matter has been added. Reconsideration of the pending claims is requested in view of the above amendments and the following remarks.

### **Claim Rejections**

Claims 17, 19, 39-44, 46-52, 54-61 were rejected under 35 U.S.C. §102(e) as being anticipated by Vardi (US 6,325,826, hereinafter "Vardi") or, in the alternative, under 35 U.S.C. §103(a) as obvious over Vardi. Applicants respectfully traverse the rejection.

Claim 17 recites, in part, a bifurcation stent and a catheter having only a single balloon. The bifurcation stent includes a stent body and multiple movable members. The stent body is expandable from an unexpanded condition, in which the movable members are retained substantially within the circumferential plane of the stent wall, to an expanded condition, in which the moveable members are extended radially outward from the stent wall, by expansion of the single balloon extending within the stent wall from a proximal end to a distal end of the stent body.

Vardi does not disclose or suggest the stent and catheter system of claim 17. Vardi discloses advancing a balloon 25 along a side branch guidewire 36 that is extending through a side opening of the stent 40. The balloon 25 is arranged to extend radially outwardly expandable portions 38 that surround the side opening in the stent 40. The balloon 25 does not extend within the stent wall from a proximal end to a distal end of the stent 40, as required by claim 17.

Furthermore, it would not be obvious to modify Vardi to position the balloon 25 as recited in claim 17. Expansion of the balloon 25 when the balloon 25 is extending from proximal to distal ends of the stent 40 would not cause expansion of the expandable portion 38.

Rather, the balloon 25 in Vardi must extend through the expandable portion 38 in order to outwardly deflect the expandable portion 38 upon expansion of the balloon 25. *Vardi*, column 8, lines 37-54.

For at least these reasons, Vardi does not anticipate and would not lead a person skilled in the art to the invention of claim 17. Claims 19 and 39-46 depend from claim 17 and are allowable for at least the same reasons. Withdrawal of the rejection and allowance of claims 17, 19, and 39-46 is respectfully requested. Applicants do not otherwise concede the correctness of the rejection and reserve the right to make additional arguments if necessary.

Claim 47 recites, in part, a catheter system including a catheter and a bifurcation stent. The catheter has a balloon arrangement including an elongate body portion and a bulge portion. The bulge portion is configured to protrude radially outwardly from the body portion when expanded. The bifurcation stent includes a stent body and multiple movable members that are expandable from an unexpanded position to an expanded position by expansion of the bulge portion of the balloon arrangement.

Vardi does not disclose or suggest a catheter including a balloon arrangement having a bulge portion. Rather, Vardi discloses a balloon 25 having one end positioned within a stent 40 and an opposite end extending along a side branch guidewire 36 through an opening 16 in the stent 40. See e.g., *Vardi*, column 8, lines 24-41. The end of the balloon 25 shown in Fig. 8 as extending through the opening 16 does not protrude radially outwardly from the body of the balloon 25 when expanded. The balloon arrangement disclosed in Vardi, therefore, does not have a bulge portion as recited in claim 47. Furthermore, no motivation is provided in Vardi to modify the balloon arrangement 25 or any other balloon embodiment to add a bulge portion as recited in claim 47.

For at least these reasons, Vardi does not anticipate and would not lead a person skilled in the art to the invention of claim 47. Claims 48-56 depend from claim 47 and are allowable for at least the same reasons. Withdrawal of the rejection and allowance of claims 47-56 is respectfully requested. Applicants do not otherwise concede the correctness of the rejection and reserve the right to make additional arguments if necessary.

Claim 57 recites, in part, a catheter system including a bifurcation stent. The bifurcation stent includes a stent body and multiple movable members. The movable members are configured as self expandable structures that move from an unexpanded position to an expanded

position when activated by expansion of an elongate body portion of a balloon arrangement within the stent wall. The stent wall defines a circumferential plane.

Vardi does not disclose or suggest self expandable structures that move from an unexpanded position to an expanded position when activated by expansion of an elongate body portion of a balloon arrangement within the stent wall. Rather, Vardi discloses an expandable portion 38 of a stent 40 that moves due to outward lateral deflection. *Vardi*, column 8, lines 49-54. In particular, Vardi discloses using a balloon 25, which extends outside of the circumferential plane defined by the stent wall, to push the expandable portion 38 radially outwardly. *Vardi*, column 8, lines 37-41.

Furthermore, no motivation is provided in Vardi to modify the expansion portion 38 to be self-expandable. While Vardi discloses self-expansion of the stent 40, itself, Vardi does not disclose or suggest self-expansion of a portion of the stent other than the stent wall itself. Rather, Vardi suggests that the wall of the stent either can self-expand or requires mechanical expansion. *Vardi*, column 9, lines 33-38.

For at least these reasons, Vardi does not anticipate or suggest the invention of claim 57. Claims 58-60 depend from claim 57 and are allowable for at least the same reasons. Withdrawal of the rejection and allowance of claims 57-60 is respectfully requested. Applicants do not otherwise concede the correctness of the rejection and reserve the right to make additional arguments if necessary.

Claim 61 recites, in part, a catheter system including a bifurcation stent including a stent body and multiple movable members. The moveable members are movable between an unexpanded position and an expanded position. A single balloon extends within the stent body from a distal end to a proximal end of a stent wall. The stent wall and the movable members are expandable by expansion of a single balloon.

In contrast, Vardi does not disclose or suggest a stent body including a stent wall and movable members that are expandable by expansion of a single balloon that extends within the stent body from a distal end to a proximal end of a stent wall. Rather, Vardi discloses deploying a balloon 25 along a side branch guidewire 36 through an expandable portion 36 of the stent 40. When the balloon 25 expands, one end of the balloon is positioned within a proximal portion of the stent wall and the other end is positioned outside of the stent wall without passing through the distal portion of the stent 40.

Furthermore, no motivation is provided in Vardi to expand the expandable portion 38 when the balloon 25 extends within the stent body from a proximal end to a distal end of the stent wall. In fact, expansion of the balloon 25 when the balloon 25 is positioned in such a manner would not cause expansion of the expandable portion 38.

For at least these reasons, Vardi does not anticipate or suggest the invention of claim 61. Withdrawal of the rejection and allowance of claim 61 is respectfully requested. Applicants do not otherwise concede the correctness of the rejection and reserve the right to make additional arguments if necessary.

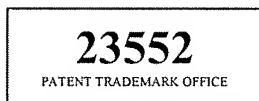
### **New Claim**

Applicants have added new claim 62, which incorporate the features of claim 45 including all of the features of the base and intervening claims. Claim 45 was objected to as being dependent upon a rejected base claim, but was otherwise indicated as allowable. Consideration and allowance of new claim 62, therefore, is respectfully requested.

### **Conclusion**


In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance. If a phone conference would be helpful in resolving any further issues related to this matter, please contact Applicants' attorney listed below at 612-371-5387.

Respectfully submitted,



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